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FOLEY & LARDNER LLP
777 EAST WISCONSIN AVENUE
MILWAUKEE, WI 53202-5306

EXAMINER	
DOUYETTE, KENNETH J	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,470	BURCHARDT, TRYGVE	
	Examiner	Art Unit	
	KENNETH DOUYETTE	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/21/06, 7/9/07, 12/23/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: In line 3, “zirkonium" is disclosed. It appears this is a misspelling, and should be “zirconium”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-23 and 28-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation “the hydrogen storage material and the high energy density metal are disposed in the electrode in a manner such that…”. It is unclear what this means in relation to the structure of the electrode. For the purposes of this office action, said limitation will be interpreted as the electrode comprising a hydrogen storage material in combination with a high energy density metal. Further, claims 2-21 and 28 are rejected since they depend from claim 1.

5. Claim 30 recites the limitation “said high energy density metal being disposed within the electrode such that it is adapted to provide...”. It is unclear what this means in relation to the structure of the electrode. For the purposes of this office action, said

limitation will be interpreted as the electrode comprising a hydrogen storage material in combination with a high energy density metal. Further, claim 31 is rejected since it depends from claim 30.

6. Claims 29 and 30 recites the limitation "the negative electrode" in line 1. There is insufficient antecedent basis for this limitation in the claim. For the purposes of this office action, “the negative electrode” will be interpreted as “a negative electrode”.

7. Claims 22-23 and 32-37 provides for the use of a hydrogen storage material and a high energy density metal respectively, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 22-23 and 32-37 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-9, 14, 19-20, 22-28, 30-31 and 33-37 rejected under 35 U.S.C. 102(b) as being anticipated by Bando et al. (US 5,965,295).

Regarding claim 1, Bando et al. discloses in Figs 1-2, an electrode (ref 4) for use in an electrochemical cell (Fig 1), said electrode (ref 4) comprising a hydrogen storage material (C7/L32-35) and high energy density metal (C7/L37), wherein the hydrogen storage material (C7/L32-35) and the high energy density metal (C7/L37) are disposed in the electrode (ref 4) in a manner such that the high energy density metal (C7/L37) is capable of acting as a hydrogen source for the hydrogen storage material (C7/L32-35) on reaction with electrolyte (C5/L66-67) and the high energy density metal (C7/L37) is capable of acting as anode (ref 4, C7/L11-37) material for the cell (Fig 1).

Regarding claim 2, Bando et al. discloses all of the claim limitations as set forth above and also discloses the high energy density metal is Al (C7/L37) or an alloy thereof (C7/L38).

Regarding claim 3, Bando et al. discloses all of the claim limitations as set forth above and also discloses the high energy density metal is mixed with PTFE (C33/L45).

Regarding claim 4, Bando et al. discloses all of the claim limitations as set forth above and also discloses the high energy density metal (C7/L37) is mixed with graphite (C7/L46-47), said graphite increasing electrode conductivity.

Regarding claim 5, Bando et al. discloses an electrode (ref 4) as set forth above wherein the hydrogen storage material is an alloy of rare earth/misch alloys (C7/L32-35).

Regarding claim 6, Bando et al. discloses an electrode (ref 4) as set forth above wherein the hydrogen storage material is mixed with PTFE (C33/L45).

Regarding claim 7, Bando et al. discloses an electrode (ref 4) as set forth above wherein the hydrogen storage material (C7/L32-35) is mixed with carbon (C7/L46-47).

Regarding claims 8 and 9, Bando et al. discloses an electrode (ref 4) as set forth above wherein the hydrogen storage material (C7/L32-35) is $LaNi_5$ or $NmNi_5$ type (C7/L32-33).

Regarding claim 14, Bando et al. an electrode (ref 4) as set forth above wherein the high energy density metal (C7/L37) and the hydrogen storage material (C7?L32-35) are in the form of a single sheet (C12/L8-12).

Regarding claim 19, Bando et al. discloses all of the claim limitations as set forth above and also discloses a mesh current collector (Fig 2) is pressed into one of the sheets (C12/L8-13).

Regarding claim 20, Bando et al. discloses an electrode (ref 4) wherein the high energy density metal (C7/L37) is in the form of a powder (C33/L37-38).

Regarding claims 22 and 23, Bando et al. discloses an electrode (ref 4) of an electrochemical cell (Fig 1), said electrode (ref 4) containing a hydrogen storage material (C7/L32-35) and also containing a high energy density metal (C7/L37) for absorbing hydrogen produced by reaction of said high energy metal with electrolyte (C5/L66-67) in said cell (Fig 1). Statements in the preamble reciting the purpose or intended use of the claimed invention which do not result in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art do not limit the claim and do not distinguish over the prior art apparatus (or process). See, e.g., *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963); *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962). If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and cases cited therein, as it has been held that the recitation of a new intended use for an old product does not make a claim to that old product patentable. *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997). See also MPEP § 2111.02, §2112.02 and 2114-2115.

Regarding claim 24, Bando et al. discloses in Figs 1-2, a method for the production of an electrode (ref 4) for use in an electrochemical cell (Fig 1), said electrode (ref 4) comprising a hydrogen storage alloy (C7/L32-35) and a high energy density metal (C7/L37), the method comprising:

- sintering or forming (C33/L38-39) with a binder (C33/L45) at least one of a high energy density metal (C7/L37) and a hydrogen storage alloy (C7/L32-35) into at least one thin sheet (C33/L49-50); and
- pressing (C33/L54-55) said at least one thin sheet for form the electrode (ref 4).

Regarding claim 25, Bando et al. discloses all of the claim limitations as set forth above and also discloses porosity is controlled by using PTFE as a binder (C33/L45).

Regarding claim 26, Bando et al. discloses all of the claim limitations as set forth above and also discloses particle to particle contact is increased by adding carbon (C33/L47).

Regarding claim 27, Bando et al. discloses all of the claim limitations as set forth above and also discloses a current collector is pressed or calendered (C12/L8-13) into said at least one thin sheet (C33/L4-50).

Regarding claim 28, Bando et al. discloses a metal hydride battery cell (C31/L55) comprising as anode (C33/L55-56) an electrode (ref 4) as set forth above.

Regarding claim 30, Bando et al. discloses a metal hydride cell (C31/L55) wherein the negative electrode (ref 4) comprises a high energy density metal (C7/L37) and a hydrogen storage alloy (C7/L32-37), said high energy density metal (C7/L37) being disposed within the electrode (ref 4) such that it is adapted to provide a hydrogen source for the hydrogen storage material (C7/L32-37) on reaction with electrolyte (C5/L66-67) within the cell (Fig 1).

Regarding claim 31, Bando et al. discloses a cell (Fig 1) is a nickel-metal hydride cell (C31/L55) as set forth above.

Regarding claims 33-37, Bando et al. discloses a high energy density metal, Al, (C7/L37) in combination with a hydrogen storage material (C7/L32-37) in an electrode (ref 4) in a nickel metal hydride batter (C31/L55) to provide self-charging (C7/L43-45), increased energy capacity (C7/L24-25), provide increased peak power (C2/L23-29), and corrosion resistance (C23/L38-39) in the battery (Fig 1). Statements in the preamble reciting the purpose or intended use of the claimed invention which do not result in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art do not limit the claim and do not distinguish over the prior art apparatus (or process). See, e.g., *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963); *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962). If a prior art structure is capable of performing the intended use as recited in the

preamble, then it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and cases cited therein, as it has been held that the recitation of a new intended use for an old product does not make a claim to that old product patentable. *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997). See also MPEP § 2111.02, §2112.02 and 2114-2115.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 10-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bando et al. (US 5,965,295) as applied to claim 1 above and further in view of Young et al. (US 6,461,766).

Regarding claims 10 and 11, Bando et al. discloses all of the claim limitations as set forth above but does not disclose a hydrogen electrocatalyst.

Young et al. discloses a battery (C1/L26) comprising an electrode consisting of a hydrogen storage material (C9/L67-C10/L1) and a powdered (C10/L18) passivating material (C9/L67) added to improve activation of the hydrogen storage material (C10/L1-4), the passivating material selected from the group consisting of Ni, Fe, Cr or an alloy thereof (C10/L20-21) and layered (C10/L22) in the electrode active material.

Young et al. and Bando et al. are analogous since both deal in the same field of endeavor, namely, batteries.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the passivating/electrocatalyst material as disclosed by Young et al. into the active material composition of Bando et al. to enhance activation of the hydrogen storage material, enhancing overall battery performance.

Regarding claims 12 and 13, Bando et al. discloses all of the claim limitations as set forth above and also discloses graphite in the active material composition (C7/L46-47), but does not disclose a hydrogen electrocatalyst deposited thereon.

Young et al. discloses a battery (C1/L26) comprising an electrode consisting of a hydrogen storage material (C9/L67-C10/L1) and a powdered (C10/L18) passivating material (C9/L67) added to improve activation of the hydrogen storage material (C10/L1-4), the passivating material layered (C10/L22) in the electrode active material.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the passivating/electrocatalyst material as disclosed by Young et al. as deposited or layered on the graphite-containing material of Bando et al. to

enhance activation of the hydrogen storage material, enhancing overall battery performance.

Regarding claim 15, Bando et al. discloses all of the claim limitations as set forth above and also discloses the high energy density material (C7/L37) and the hydrogen storage material (C7/L32-35) are in the form of a single sheet (C12/L8-12), but does not disclose a hydrogen electrocatalyst disposed within the sheet.

Young et al. discloses a battery (C1/L26) comprising an electrode consisting of a hydrogen storage material (C9/L67-C10/L1) and a powdered (C10/L18) passivating material (C9/L67) added to improve activation of the hydrogen storage material (C10/L1-4), the passivating material selected from the group consisting of Ni, Fe, Cr or an alloy thereof (C10/L20-21) and added in the electrode active material.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the passivating/electrocatalyst material as disclosed by Young et al. into the active material composition of Bando et al. to enhance activation of the hydrogen storage material, enhancing overall battery performance.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bando et al. (US 5,965,295) as applied to claim 1 above and further in view of Ouchi et al. (US 6,258,482).

Regarding claim 16, Bando et al. discloses all of the claim limitations as set forth above but does not disclose the high energy density material and the hydrogen storage material are in two separate sheets.

Ouchi et al. discloses a battery (Abstract) comprising electrodes formed of a metallic layer (C3/L6) deposited on a hydrogen storage material (C3/L14-15), forming distinct layers. This configuration reduces surface oxidation of the hydrogen storage material (C2/L10-11), thus enhancing overall battery performance.

Ouchi et al. and Bando et al. are analogous since both deal in the same field of endeavor, namely, batteries.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the high energy density material and hydrogen storage material of Bando et al. as distinct layers as disclosed by Ouchi et al. to reduce surface oxidation of the hydrogen storage material and therefore enhance overall battery performance.

14. Claims 17, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bando et al. (US 5,965,295) in view of Young et al. (US 6,461,766) as applied to claim 10 above and further in view of Ouchi et al. (US 6,258,482).

Regarding claim 17, modified Bando et al. discloses all of the claim limitations as set forth above but does not disclose the high energy density material and the hydrogen storage material are in two separate sheets.

Ouchi et al. discloses a battery (Abstract) comprising electrodes formed of a metallic layer (C3/L6) deposited on a hydrogen storage material (C3/L14-15), forming distinct

layers. This configuration reduces surface oxidation of the hydrogen storage material (C2/L10-11), thus enhancing overall battery performance.

Ouchi et al. and Bando et al. are analogous since both deal in the same field of endeavor, namely, batteries.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the high energy density material and hydrogen storage material of Bando et al. as distinct layers as disclosed by Ouchi et al. to reduce surface oxidation of the hydrogen storage material and therefore enhance overall battery performance.

Bando et al. discloses a high energy density metal (C7/L37) in an active material composition, but does not disclose a hydrogen electrocatalyst in combination.

Young et al. discloses a battery (C1/L26) comprising an electrode consisting of a hydrogen storage material (C9/L67-C10/L1) and a powdered (C10/L18) passivating material (C9/L67) added to improve activation of the hydrogen storage material (C10/L1-4), the passivating material selected from the group consisting of Ni, Fe, Cr or an alloy thereof (C10/L20-21) and layered (C10/L22) in the electrode active material.

Young et al. and Bando et al. are analogous since both deal in the same field of endeavor, namely, batteries.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the passivating/electrocatalyst material as disclosed by Young et al. into the active material composition containing the high energy density metal of Bando et al. to enhance activation of the hydrogen storage material, enhancing overall battery performance.

Regarding claim 18, modified Bando et al. discloses all of the claim limitations as set forth above but does not disclose the high energy density material and the hydrogen storage material are in two separate sheets.

Ouchi et al. discloses a battery (Abstract) comprising electrodes formed of a metallic layer (C3/L6) deposited on a hydrogen storage material (C3/L14-15), forming distinct layers. This configuration reduces surface oxidation of the hydrogen storage material (C2/L10-11), thus enhancing overall battery performance.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the high energy density material and hydrogen storage material of Bando et al. as distinct layers as disclosed by Ouchi et al. to reduce surface oxidation of the hydrogen storage material and therefore enhance overall battery performance.

Bando et al. also does not disclose a hydrogen electrocatalyst as a separate shee/layer.

Young et al. discloses a battery (C1/L26) comprising an electrode consisting of a hydrogen storage material (C9/L67-C10/L1) and a powdered (C10/L18) passivating material (C9/L67) added to improve activation of the hydrogen storage material (C10/L1-4), the passivating material layered (C10/L22) in the electrode active material.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the passivating/electrocatalyst material as disclosed by Young et al. as layered as a separate layer in the electrode of Bando et al. to enhance activation of the hydrogen storage material, enhancing overall battery performance.

Regarding claim 21, Bando et al. discloses an energy carrier (noted in the instant specification as the same as a "high energy density material", C7/L37), a hydrogen absorption material (C7/L32-37) and a mesh current collector (C19/L36, ref 22, Fig 2), but does not disclose the energy carrier and hydrogen absorption material are disposed as distinct layers.

Ouchi et al. discloses a battery (Abstract) comprising electrodes formed of a metallic layer (C3/L6) deposited on a hydrogen storage material (C3/L14-15), forming distinct layers. This configuration reduces surface oxidation of the hydrogen storage material (C2/L10-11), thus enhancing overall battery performance.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the high energy density material and hydrogen storage material of Bando et al. as distinct layers as disclosed by Ouchi et al. to reduce surface oxidation of the hydrogen storage material and therefore enhance overall battery performance.

Bando et al. also does not disclose a hydrogen electrocatalyst as a separate shee/layer.

Young et al. discloses a battery (C1/L26) comprising an electrode consisting of a hydrogen storage material (C9/L67-C10/L1) and a powdered (C10/L18) passivating material (C9/L67) added to improve activation of the hydrogen storage material (C10/L1-4), the passivating material layered (C10/L22) in the electrode active material.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the passivating/electrocatalyst material as disclosed by Young

et al. as layered as a separate layer in the electrode of Bando et al. to enhance activation of the hydrogen storage material, enhancing overall battery performance.

15. Claims 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bando et al. (US 5,965,295) in view of Ovshinsky et al. (US 6,620,539).

Regarding claim 29, Bando et al. discloses in Figs 1-2, an electrochemical cell (Fig 1) wherein a negative electrode (ref 4) comprises a high energy density metal (C7/L37) and a hydrogen storage material (C7/L32-37), said hydrogen storage material being disposed within the electrode (ref 4) such that it is adapted to absorb hydrogen produced by reaction of high energy density metal (C7/L37) and electrolyte (C5/L66-67) in said cell (Fig 1). Bando et al. does not disclose a metal-air fuel cell.

Ovshinsky et al. discloses an alkaline fuel cell (C1/L14) comprising an anode including a hydrogen storage alloy (C6/L60-61) to produce energy.

Ovshinsky et al. and Bando et al. are analogous since both deal in the same field of endeavor, namely, hydrogen storage materials in electrochemical cells.

As fuel cells were well known in the art at the time the invention was made, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the active materials disclosed by Bando et al. into electrodes of a fuel cell as disclosed by Ovshinsky et al. Said combination would amount to use of a known element for its intended use in a known environment to accomplish entirely expected result.

Regarding claim 32, Bando et al. discloses in Figs 1-2, a hydrogen storage material (C7/L32-35) in combination with a high energy density material (C7/L37) in an electrode (ref 4) in an electrochemical cell (Fig 1) for prevention of corrosion to the electrode (C23/L38-39). Bando et al. does not disclose a metal-air fuel cell.

Ovshinsky et al. discloses an alkaline fuel cell (C1/L14) comprising an anode including a hydrogen storage alloy (C6/L60-61) to produce energy.

As fuel cells were well known in the art at the time the invention was made, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the active materials disclosed by Bando et al. into electrodes of a fuel cell as disclosed by Ovshinsky et al. Said combination would amount to use of a known element for its intended use in a known environment to accomplish entirely expected result.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH DOUYETTE whose telephone number is (571)270-1212. The examiner can normally be reached on Monday - Thursday 6am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. D./
Examiner, Art Unit 1795

/Jonathan Crepeau/
Primary Examiner, Art Unit 1795